

Managerial Economics
2017, vol. 18, No. 2, pp. 147–163
<http://dx.doi.org/10.7494/manage.2017.18.2.147>

Sławomir Czetwertyński*

Importance of copyrights in online society

1. Introduction

Civilization history of the West is a history of a private ownership. This is unquestionably one of the most-important social “inventions” and a key institution of the market economy, an essence of capitalism, a source of effective managing, and a reason for conflicts. Irrespective of these considerations, private ownership constitutes one of the central elements of the order. In light of a social contract, private ownership is contrary to a natural situation which people give up in exchange for personal safety and things that people consider as theirs (cf. Golinowska 1994, p. 20). When considering the origin of private ownership, J.M. Buchanan (2000, pp. 12–15) mentions a universal need for the differentiation between things that are mine and those that are yours (“mine and thine”). Moreover, he states that setting out boundaries of ownership is a source that enables the primary definition of a particular person – a specified one, via the prism of his/her rights to things in relation to a society. In such a meaning, private ownership is one of the main foundations of a social contract; or in the meaning presented by J.M. Buchanan (2000, p. 69) – a constitutional contract. Among others, the legal setting up of a private ownership is an element leading from anarchy to a functioning society.

In the opinion of J. Rifkin (2016, p. 42), private ownership in the presently known form occurred during a period of plots fencing in England in the 17th and 19th centuries. And even if this is a period that is closer to contemporary times as compared to the social contract, ownership still mainly responds to tangible values. This remark has significant meaning, since civilization (or, in other words, the economy) was mainly based on tangible values before the turn 21st century. Obviously, this does not mean that intangible value had no importance, since it

* Wrocław University of Economics, Department of Microeconomic and Institutional Economics, e-mail: slawomir.czetwertynski@ue.wroc.pl.

has always been important – however, it was treated differently than it is today. It should be mentioned that, at the turn of the 20th century, one considered goods only in the context of their tangible values; this is well-seen in case of the A. Marshall (1920, p. 54). This approach was preserved in economics theory for the entire 20th century. When referring to goods, O. Lange (1978, p. 15) and others defined them as tangible resources intended to satisfy human needs.

In the context of the considerations regarding ownership, materiality originated from a prehistoric period when primitive man (in touch with his/her natural environment) separated objects necessary to satisfy his/her needs. This process has been considered by J. Kurowicki (2010, p. 24–28) showing the conversion of a thing (an object separated from its environment), an object (a thing converted by means of work), and a product (an object being the result of socialized work). Considerations regarding the relationships between an object and a human conducted by J. Kurowicki stay within the tangible plane. This results from the fact that, at previous stages of civilization, the existence of development was so significant that the economy was based mainly on material flows.

Today, the matter is less important, but a larger and larger part of the economic mechanism is based on intangible values. The knowledge-based economy, information economy, or creative economy is a picture of weight transfer of values from material raw materials to intangible ones. In L.C. Thurow's opinion (2006, pp. 207–208, 215), growth of the production rate due to the application of more and more sophisticated know-how results in the replacement of matter with information – which is an immaterial factor. This is an essence of a contemporary change that has become more and more noticeable. Concentrating on a creative sector, one may not omit the growth of importance of this economic branch in developed countries. A creative sector is a source of values that, among others, take the form of content supplying the production of information goods (or simply, “works”). Obviously, the creative sector is much more than information goods (cf. Newbigin, 2010, pp. 16–21), but the creative-content industry (Florida 2012, p. 30) based on intellectual property in the form of copyrights (Howkins 2001, s. xii) constitutes its serious part with which the online society deals every day¹.

The creative-content industry products flow via the Internet in the form of digital information goods and satisfy the needs of a society. Internet websites, information news, movies, music, electronic books, and other digital types of information goods are converted by computers and smart phones responding to

¹ Generally, the creative-content industry includes the following activity areas: advertising, architecture, broadcast media, design – fashion design, graphic design, interior design, product design, gaming software, new media, film, the “finer” arts – literary, visual, and performance arts, libraries, museums, heritage, music, photography, print media, object d’art – glass, ceramics, cutlery, crafts, and jewelry (cf. Power, 2011, p. 31).

the growing demand produced by people who need regular contact via modern IT grids. The flow of digital information goods is regulated by means of copyrights, which are equivalent to ownership rights originating from the tangible economy. As private ownership regulates the ownership of a particular person in his/her relationship to society, copyrights regulate access of a particular person to intangible values. However, the relationships of access to content in information goods in the online society are different compared to relationships based on having an object. This results from the fact that the nature of copyrights themselves is different from private ownership. The differences result from (among others) the function copyrights were supposed to play in another social-economic reality – before the creative-content economy and the all-embracing Internet as well as from an abstractive nature of information goods.

This paper aims to determine the importance of copyrights in the field of relationships taking place in the online society. One needs to consider the bi-polarity of copyrights that protect authors from the one hand and prevent the occurrence of the so-called author's monopoly from the other. At the same time, one needs to deal with the validity of the copyright idea and the way it is perceived and observed by online society members. In the paper, a hypothesis is advanced that the bi-polarity of copyrights responds to the needs of the online society, but the formal copyright institution has no serious authority like the institution of ownership rights to tangible things has. The equity of such a hypothesis means that the online society treats the ownership of intangible value less radically as compared to tangible value. Consequently, in the online society, a dissonance takes place between the formal copyright institution and the informal norms regulating the flow of the content (which takes the form of digital information goods).

In this paper, a deductive approach was applied. Considerations were based on two basic pillars. The first is connected with the copyright institution and its bi-polar idea consisting of the reconciliation of the interests of the authors with public interest. The second pillar is the observation of size, extent, and content of the flows within the online society. Finding out the issues for which the pillars in question constitute a solid basis and (in the case of when they constitute a very doubtful basis) shall enable us to explain the general importance of copyrights in the relationships taking place in online societies and the verification of the advanced hypothesis.

2. Copyrights and their bi-polarity

The ownership right, in its varied form, is as old as Western civilization, but intellectual property rights are much-younger institution. In the context of this paper, copyrights must be separated from the group of legal monopolies that the

intellectual property rights include. Hence, patents and trade signs, which became the subject of a legal monopoly later compared to intangible goods (works), shall be omitted. Copyrights are governed by a number of documents and acts. At the international level, the most-important of these are the Berne Convention, Rome Convention, TRIPS Agreement, and WIPO treaties (cf. Brata, Markiewicz, 2013, pp. 411–425). In the European Union, a common copyright law does not exist. Nevertheless, the issue of copyrights is established in Directive 2014/26/EU of the European Parliament and of the Council of 26 February 2014 on the collective management of copyright and related rights as well as the multi-territorial licensing of rights in musical works for online use on the internal market, which affects domestic law regulations in the member states.

The beginnings of copyrights are correlated directly with the occurrence and popularization of the printing press. The invention of the printing press was a direct reason for the implementation by rulers of legal solutions regarding copied content. However, the intent to implement an “ancestor” of the copyright institution was not to protect authors but to control the content and numbers of copies printed. Therefore, a direct impulse to establish the institution called copyrights today harkens back to the invention of the printing press. At times, when the only possibility of copying books was to rewrite them in scriptoriums, the problem of the non-controlled distribution of content (especially, not favorable for authorities – laic or sacral ones) did not exist. Hence, the first “copyrights” (more accurately considered printing privileges) aimed to impose some publishing limits on authors and, in practice, on printers (cf. Rose, 1993, pp. 9–11). A change in the approach came along with *Anne’s Law*, which came into existence in 1710. Commonly, it is recognized that this is the first document assigning rights to authors (Górnicki, 2013, p. 122). The rights awarded to authors by means of *Anne’s Law* are the basis of the contemporary idea of copyrights (Levinson, 2010, p. 128).

Anne’s Law awarded authors exclusive rights to making decisions on the printing of their works; hence, moving the weight of the copyright idea into tangible aspects, assuring authors the de facto financial profits originating from their works. However, an essence of copyrights is not only the protection of an author’s interest but also of social (public) interest. Hence, in the course of the development of copyrights, a limitation of the copyrights took place to the benefit of social profits originating from a greater access to works (Górnicki, 2013, p. 210). Therefore, along with internationalization of the copyrights, there occurred a bi-polarity of the relationships between the protection of the author’s interest and non-admission to occur an author’s monopoly. From one side, copyrights were intended to protect authors in the personal and property fields, and from the other, to prevent total exemption of a work from its access to society. The second aspect has a special meaning in the context of the diffusion of culture,

knowledge, and idea in a society, as a consequence of which cultural, scientific, and political development takes place (Gienas, 2008, pp. 198–199).

The idea of copyright bipolarity is a sophisticated way to establish a relationship between an author and a society. This relationship consists in the mutual profits exchanged between the authors and a society. Authors gain resources from a society (which assure them a means of existence) and the society gains the mental (intellectual) profits. It should be mentioned here that the goals of an author and a society may differ. The author can work exclusively to make money; in such a situation, it is in his/her best interest to protect his/her ownership rights, or in order to distribute his/her ideas, opinions, talents, or images of himself/herself – his/her best interest needs protection. This first case may be a source of conflict between an author and a society. It is the effect of a situation when an author takes great strides to seriously limit access to his/her works. This intent is clearly contrary to society's interest, which is unlimited access to works – which is a result of a will to maximize consumption. In such a view, the interests of an author and a society are contrary. An author heads for limitation, and a society heads for no limits; the copyright institution balances on a thin line between these contrary interests.

For sure, the idea of copyright bi-polarity is right from point of view of the social norms accepted in the West. The provision of profits for an author originating from his/her work and, at the same time, the non-admission to exclude part of a society from the advantages originating from the works are right when it comes to civilization growth. However, the practical realization of bi-polarity may turn out to be a source of conflict itself, as well as misunderstandings and opportunistic behavior (Czetwertyński, 2016d, p. 68–69). Nevertheless, the bi-polarity of copyrights must be treated as the end of the evolution of this institution characterized by universality and timelessness.

3. Flows in online society

The growing meaning of copyrights (and, more universally, intellectual property) is an issue that emerged in the literature at the end of the 20th century. This issue was considered by L.C. Thurow (2006, pp. 142–155) and C. Shapiro and H. Varian (2007, pp. 97–116). Their considerations in this field are not surprising; in particular, in the context of growth of the importance of information in the economy. From the point of view of this paper, one needs to emphasize that the growth of content transfer in society is noticeable. This growth has never been seen before; not only has the scale changed, but also the roles of the entities taking place in it. A main motor of such changes is the Internet, which, in M. Castells'

opinion (2003, p. 11), has become for the contemporary online society what the electric energy grid was for the industrial society.

The popularization of the Internet, development of miniaturization, and mobile technology made that a serious part of society in developed countries keeps permanently connected. Saying it in pop-culture slang: “they are online.” The term “online society” is not generally recognized, and there is no single accepted definition. Contrary to such terms as information society or network society (cf. Czetwertyński and Mroczek-Czetwertyńska, 2012, pp. 118–120), the term “online society” is used by authors without deep thought, as it is a term that is generally easy to understand. Generally, one can state that the online society stays within designates of the definition of both an information society and a network society. Hence, one could limit himself/herself to one of two recognized terms. Nevertheless, one must not ignore the fact that, in the literature, references to the online society have appeared more and more frequently (cf. Herold and Marolt, 2011; 2015, Waldman, 2013). In the case of the series of collective works of D.K. Herold and P. Marolt, the adjective “online” aims to separate people having access to Internet from a set of designates of the term “society.” In turn, A.E. Waldman considers the *online* society is a set of “virtual selves.” For the needs of this paper (and to make it clear), the author has accepted the definition stating that the online society is the group of post-industrial society members who keep permanent relationships by means of regular access to the Internet. Designates of this definition will be such people who stay connected to the Internet irrespective of the time or place. As a consequence, the online society is not limited by country boundaries or timeframes.

The online society is characterized by the asynchronism of a place and a time described by P. Levinson (2006a, pp. 224; 2006b, pp. 25–26). The asynchronism of a place and time consists of the possibility of communication irrespective of place. Levinson presents it as a break of relationships between a user and a room that is an allegory of a place reserved for connection by means of a desktop computer, for example. De facto, it comes about a mobility, which Levinson presents in relationship to mobile phones, just mentioning personal digital assistant. In turn, the asynchronism of time consists of the possibility to record and play information on the Internet. Levinson’s considerations regarded technological order before the popularization of smart-phones (which enhanced the asynchronism of place and time). Contemporarily, this asynchronism can be matched with the fact that people who want to exchange communications between them do not have to stay in the same place at the same time. The asynchronism of place and time is also associated by the asynchronism of social status (Brol and Czetwertyński, 2013a, pp. 314–317), consisting of the possibility to participate in a debate in a virtual public sphere, irrespective of social status and financial capabilities. As

an effect, the actor in a virtual public zone of the online society can be each and every member.

The asynchronism of the online society is connected with the activity of its members, who play social roles previously reserved only for selected social groups. Generally, it comes about the capabilities to produce content and share it. A reader from a previous epoch in the online society can be an author (cf. Levinson, 2006a, pp. 233–234). As a result of this, there is still a growing blog zone and growing importance of social media (cf. Czetwertyński, 2013, pp. 7–14). As an effect, very serious quantities of information recorded is produced by means of text, sound, and pictures. Statistics of Internet traffic reveal a dramatic growth in the transfer rate. In 1992, the Internet transfer rate equaled 100 GB daily. In 2015, it was already at 20,000 GB per second, and it is estimated that this value will exceed 61,000 GB per second by 2020. This means that the online society will generate 21 GB of data annually *per capita* (Cisco Systems Inc., 2016b).

Statistics conducted by Cisco Systems Inc. in terms of the *Visual Networking Index* (VNI) include varied types of content flowing via the Internet. A general division is business data and consumer data. In the context of this paper, one may concentrate on the Internet traffic analysis generated by consumers. It is related with the fact that consumers are non-institutional Internet users whose activity means downloading, sending, or exchanging digital information goods. One should mention that the division proposed by Cisco System Inc. does not respond ideally to the considerations conducted here. However, the flows of content generated by consumers are closer to the issue of copyright importance when compared to business flows (which are usually connected with financial information, documents, or logistics, which means that they are not subject to copyright since they are not works).

In the framework of the VNI, four data segments were distinguished (Cisco System Inc., 2016a): (1) Internet video; (2) web, email, and data; (3) files sharing; (4) online gaming. In Figure 1, the Internet traffic is presented as divided into the aforementioned segments from 2015 to 2020 (forecast from 2017) in peta-bytes (one petabyte is 1 M GB). A deeper analysis points out that the main factor affecting the size of the transfer in recent years is Internet video transfer. The very dynamic growth of this type of data results from two basic reasons. The first one is related with the growing requirements of consumers regarding audio-video content quality. The second one – with data transfer technological capabilities. This means that the technological capability exists to meet growing needs of consumers. One should consider that providers of Internet video are two types of websites. The first one consists of commercial websites, including Netflix, that provide content in exchange for cash, and the second one consists of websites belonging to such social media as YouTube. The Netflix and YouTube

examples are especially meaningful. The first one generated 34.7% of the total Internet traffic in fixed access in Northern America in 2015. The second one came second, generating nearly 17% of the Internet traffic in Northern America, and the first one in Europe, with a value exceeding 21% (Sandvine Inc., 2015a, p. 3; 2015c, p. 4). Taking into consideration the fact that YouTube is very popular in Northern America (16.88%), Latin America (30.11%), Europe (21.16%), Asia and the Pacific (24.64%), and Africa (14.05%), and Netflix operates mostly in Northern America, the main generator of Internet video in regular access is YouTube (cf. Sandvine Inc., 2015a, p. 3, 12.; 2015b, p. 8; 2015b, p. 4, 10).

The remaining values presented in Figure 1 are quite stable in relation to Internet video, which arises from the fact that content in the form of text needs a relatively small amount of space. It must be noted that the exchange of files drops; this is related with a decrease in the popularity of file-exchange system BitTorrent (cf. Sandvine Inc., 2015a, p. 3, 12; 2015b, p. 8; 2015b, p. 4, 10), via which audio-video content is exchanged (cf. Czetwertyński, 2016e, p. 507). The BitTorrent network has been pushed out by Internet video, while a larger part of file exchange is balanced by the growing popularity of cloud technology. The last segment of Internet traffic, which is online games, has no special importance for considerations in this paper, mainly because the flowing content is data regarding a play instead of an author's works.

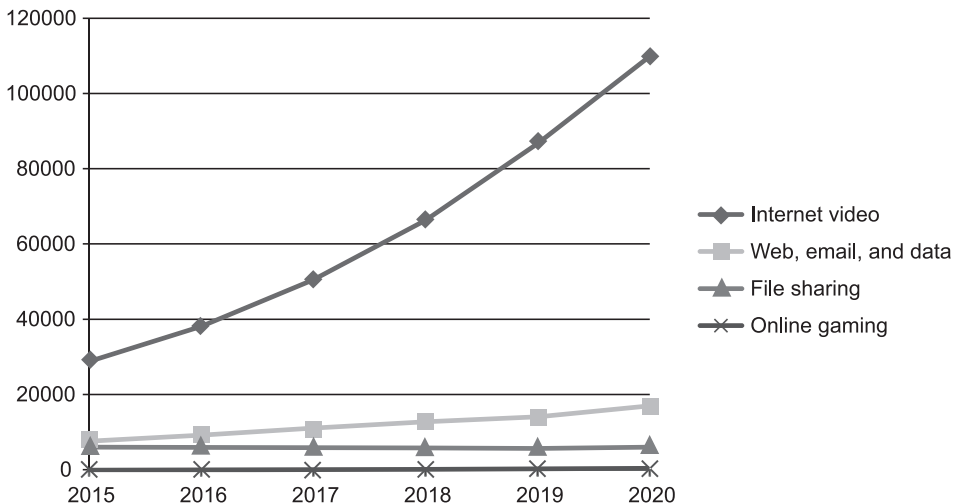


Figure 1. Internet traffic along with forecast, generated by consumers, divided into segments in 2015–2020 in peta-bytes

Source: Cisco Systems Inc. (2016a)

To sum up this short review of statistics of flows in the online society, one needs to pay attention to the meaning of User Generated Content (UGC). It can be absolutely by an author's content or compilations of somebody's quotes, referred to or edited, or just simply "pasted." Their form is free: hyper-text, e-mail, sub-cast, meme, etc. From the point of view of this paper, these are important since they are directly related to copyrights. Newly-established author content (formally called "works") cause the existence of other limits arising from copyrights; in turn, the use of somebody else's works can lead into a breach of the already-established copyrights.

4. Unauthorized turnover problem

The flow of content among Internet users consists of sending and receiving different types of digital information goods. Content generated by users can be an author's or based on somebody else's work. It is unquestionable that, during the constant "dialog" that takes place on the Internet, it is hard to avoid breaching copyrights. Differently from traditional dialogs taking place in a public zone or in a private one, an effect of which there are not established works, a discussion taking place in a virtual zone leaves a trace in the form of digital information goods. When generated content is recorded, one should recognize it to be work(s) (or post-work[s] if it is based on previously existing ones). In the case that one bases on previously existing works, a breach of copyright takes place that are regulated by the legal systems in varied countries in the same way. It comes about the so-called fair use, which enables use of other author's works in defined frameworks without consent of the author (Gienas, 2008, pp. 198–206). This institution (or the equivalent of it) is necessary since, in another case in practice, it would not be possible to consume information goods mutually during everyday life (cf. Czetwertyński, 2016d, pp. 61–62).

Fair use in the Internet era enables us to distribute ideas relatively freely, to apply somebody else's works, and to comment on them without the necessity of getting permission from the authors and without fear of the legal consequences arising from a breach of copyright. In the framework of fair use on the Internet, unauthorized trade takes place, which means the occurrence of newer and newer digital copies of the information goods, and simultaneous legal breaches of the copyrights (Czetwertyński, 2015a, p. 67). Fair use establishes a thin line between legal and illegal actions. Among others, websites such as YouTube and Facebook can operate due to this fair use.

Even if unauthorized trade in the framework of fair use should be considered to be a necessary element of contemporary social contacts, the violation of copyrights

resulting in legal consequences constitutes a serious problem of an economic, legal, and social nature. Online society, along with the development of ICT technology (Information and Communication Technology) gained the ability to trade works at a serious scale, extending the *de facto* extent of private copying to a global phenomenon (cf. Czetwertyński, 2015b, pp. 21–22). Private copying is a common practice, and it has occurred simultaneously to the development of information-goods-copying technology intended for the casual consumer. The meaning of this went up in the 80s when copying machines, recorders, and video-recorders became something common. This was the time when researchers started paying attention to this issue. S.M. Besen (1984), S.M. Besen and S.N. Kirby (1987), W.R. Johnson (1985) and S.J. Liebowitz (1985) considered the impact of private copying on the information goods market, pointing out the threats that this phenomenon could bring. However, the negative impact of private copying before the popularization of the Internet was incomparably less than it is today. Private copying, which means the practice of sharing information goods among small social groups characterized by direct social relationships (cf. Czetwertyński, 2016c, p. 460), usually stay within the fair use extent [Gienas 2008, pp. 199–203]. A problem is the fact that, along with the popularization of the Internet, the extent of social groups and directness of social relationships have been re-defined. The so-called copy culture occurred, which is a “system of behaviors meaning non-market re-production of information goods, taking place acc. to patterns common for a particular society, created and purchased during a process of social interactions” (Czetwertyński, 2016c, p. 457).

The copying culture, common in the online society, leads to unauthorized trade that can fulfill fair use – both private and public (Gienas 2008, p. 203–204), or cause penal consequences arising mainly from the distribution of works without consent; e.g., by the publication of a movie or music video on one of the video-sharing websites.

As an informal institution, the copy culture originated from a time from before the popularization of the Internet. Therefore, it intakes from norms characteristics for the industrial society and previous stages of post-industrial society, but from before the Internet revolution. Hence, the standards of exchange, reproduction, and distribution of information goods arise more from an ownership-rights tradition to material things rather than copyrights. It can be explained on the basis of an analogy. Theft, which is socially unacceptable, consists of the embezzlement of somebody else’s thing. But, if a thing is copied, it is not embezzled, so it is not associated with theft. If this example is transferred into information goods, copying them is not perceived as something wrong. It is the result of the fact that a tricky analogy is applied between having a thing on the grounds of ownership rights and just access to works awarded on the basis of copyrights (cf. Czetwertyński, 2016a, pp. 49–52).

The last issue related with the non-authorized digital information goods trade is the problem of the illegal distribution of works via the Internet, which is frequently called digital piracy (or Internet piracy, or sometimes media piracy), defined by P. Stryszowski and D. Scorpecci (2009, p. 7) as the infringement of copyrighted content (such as music, films, software, broadcasting, books etc.) where the end product does not involve the use of hard media such as CDs and DVDs. The previous definition is not very accurate since, as mentioned earlier, a breach of copyright may not cause penal consequences if it stays within the extent of fair use. Hence, designates of such a digital piracy definition are legal actions as well, and the “piracy” would point out illegal actions characterized by a criminal nature. In order to classify practices based on fair use for this extent, for needs of these considerations one should implement a more-accurate definition of the populist one – “digital piracy.” This is just the illegal distribution of digital information goods with the intent to acquire financial gains. Utility of this action is also significant since, in this way, it is distinguished from the illegal trade taking place in the framework of the copy culture and which arises from accepted social norms instead of the intent to acquire financial gains originating from, *de facto*, an intentional crime.

The extent of the unauthorized trade is difficult to be determined, and the published data is frequently incomparable. It is also significant that, in a statistical test, it is difficult to determine which part of unauthorized trade is legal and which is illegal. Usually, the legality issue is neglected or the entire unauthorized trade is closed within the “digital piracy” term. To picture the phenomenon scale, one can quote the following statistics. D. Price (2013, p. 3) estimated that, in 2013, about 23% of the Internet traffic in Northern America, Europe, and Asia & the Pacific region was caused by a breach of copyrights. In turn, J. Karaganis and L. Renkema (2013, p. 5) pointed out that, in the USA and Germany in 2011, approx. 45% of the population copies information goods from each other, mostly via the Internet. Analyzing these values, one can advance the hypothesis that nearly half of the population generates the unauthorized digital information goods trade, which consumes nearly 1/4 of global Internet traffic. Even if this is just a hypothesis that needs to be verified by means of statistical tests, it brings a certain idea of the scale of the unauthorized digital information goods trade.

5. Consequences of copyrights – pros and cons

In the progress of previous considerations, four key issues were enumerated. The first one regarded the bi-polarity of copyrights that protects the author’s interests from one side and protects the interest of a society by non-admission of

the author's monopoly from the other. The second one was related with flows in the online society, which have gone up over the last decade. The specificity of the flows consisting in the asynchronism of place, time, and social status results in consequences in the context of the author's works and the use of already-existing works to establish after-works. The third one was the inadequate adoption of informal norms regarding the circulation of tangible goods to the digital information goods trade via the Internet. As an effect, a dissonance took place between the informal copy culture and the formal copyright institution. The fourth issue was the scale of the unauthorized digital information goods trade via the Internet. Since this scale is relatively related with the flows in the online society, then, along with the growth in its meaning from marginal one, it has become a first-class issue for industries that produce information goods and the creative-content industry.

The consequences caused by copyrights are a frequent reason for the discussion of their fairness, validity, and efficiency. In this field, the society is very divided; in extreme cases, it leads to a crisis in copyright authority (Czetwertyński, 2016a, pp. 48–49). Deprecating from populism and trying to stay objective, one needs to state that the online society must understand the idea of copyrights more deeply compared to the offline society that is in a society where the intangible value flow was not so large and the capability of copying works was limited.

The first issue that must be pointed out is the unintended effect of participation in a dialog in the virtual public zone (cf. Brol and Czetwertyński, 2013c, pp. 10–13) taking place via the Internet. The specificity of the dialog taking place, which means the production of content, in fact results in new works. Some of them take known and clear forms, such as papers in social media or other more-complicated areas like terms on Wikipedia.org. In both cases, a work is created, and it is subject to copyright. A problem is that it is not always justified to protect such content by means of copyright. In the case of a paper, this is understandable, and all references take place pursuant to the copyright; but in the case of a term placed on Wikipedia.org, the reservation of copyrights would be a limitation for the idea of development and improvement of the Internet encyclopedia. Hence, there is a need for the awareness of consequences of the copyrights, which was totally neglected before the Internet era. A response to this need is an idea stream determined by the term “copyleft” (cf. Brol and Czetwertyński, 2013b, p. 141–143), which enables the application of copyrights in such a way as not to limit the development of an idea, knowledge, and (the primary reason) software (cf. Dixon, 2004, pp. 22–25). The copyleft concept is a certain type of copyright reverse – it is to prevent from reservation of rights to a work. A practical picture of this idea consists of licenses from the Creative Commons family or GNU (GNU's not Unix), which extensively determine “reservations” and “freedom.” They are intended to provide unlimited development in terms of creative human operation. For example, the GNU Linux

project has been developed thanks to the GNU General Public License and Wikipedia.org thanks to Creative Commons. Depending on the situation, copyleft licenses can partially or totally deprive the authors of their copyrights – which is desired in this case. Moreover, these licenses operate like viruses, which means that, once applied, they do not enable anyone to reserve any work based on licenses. In this way, a collection of works appears that belongs to everybody and with which everybody can use under the terms and conditions set out by means of the copyleft.

The second issue is related to the existence of the copyrights is the fact that flows in the online society can cause legal consequences. This is related to unauthorized trade that is illegal in certain cases, even if the goal of those generating the trade is not intended to acquire financial gains. An issue to be considered is not the issue of work reservation fairness but the fact that the scale of the illegal digital information goods trade is so large that the level of copyright enforcement is minimal. What is more, here is an area for opportunists; in particular, an area related to *copyright trolling*, which means the acquisition of financial gains due to a breach of copyrights by third persons who do not acquire financial gains from this action (cf. Czetwertyński, 2016d, pp. 59–61). Another form of gaining profits by third parties is the practices applied by certain websites that enable multimedia streaming. Individual users enter movies that are covered by copyrights, de facto committing illegal distribution while owners of the websites do not react until they receive a required demand. Therefore, they have become more and more popular. Such practices are frequently underestimated by the owners of the copyrights; this has been proven by the ease of access to such materials (among others). Moreover, representatives of the entertainment sector (e.g., J. Bewkes – General Director of Time Warner) say that the scale of the unauthorized trade of their productions is rather a form of nobility rather than something wrong (cf. Tassi 2014).

The last practice that hampers the interests of copyrights holders is a practice oriented to the acquisition of profits. In such cases, the owners of websites that enable multimedia streaming enter the works illegally, which is illegal and a punished practice by the system of justice. However, this procedure is profitable enough, and although many websites have been closed and charges have been raised against their owners, new ones still occur. They are more and more popular, among others, because they are sometimes payable and have a larger number of items (content) compared to their legal equivalents. (Czetwertyński, 2016b, pp. 11–12). One should also take into account that Internet users who watch digital information goods via the websites (usually movies) do not incur any responsibility, since the distribution is illegal but not watching. The practice of digital information goods illegal distribution significantly deepens the copyright institution crisis, since law enforcement authorities also seem to underestimate the problem as much as the copyrights holders.

6. Miscellaneous

Copyrights, even if in a populist way, are still criticized yet are still valid. Although they were developed at times when even futurists did not estimate such ICT technology growth, they still respond to the needs of the contemporary online society. What is more, their bi-polar essence has gained a new importance. Due to this, it is possible to keep an asynchronism of the relationships of places, time, and social status, since it protects part of the online society from exemption from a dialog taking place in the virtual public zone. Copyrights also provide the opportunity to assure the free development of digital information goods due to applying them in the copyleft concept, which is an image of another approach to the issue of “reservations” and “freedom” in the online society.

The problem is the constantly insufficient social awareness when it comes to their role, which consequently runs to a disharmony between casual norms and a formal institution. Despite the progress (which is the copyleft concept), copyrights are still not the subject of such authority as ownership rights to tangible things. It seems that the online society has adopted technological accomplishment quicker compared to the institutional one. Technological solutions resulted in the widely expression of the copy culture, signs of which are not compliant with the copyrights institution to some extent. Members of the online society treat copies of digital information goods (to which they have access under the terms and conditions of copyrights) as their own in the light of ownership rights. Consequently, they dispose of them as is common as disposing of any tangible thing that belongs to them. The problem is that, in the course of a transfer of tangible goods to a second person, ownership rights are also transferred to this person. However, when transferring copies of a digital information product, the rights to them are not automatically transferred. This results from the fact that copyrights specify the terms and conditions of the use of goods in relation to a particular person. It is unquestionable that the private ownership institution is much more deeply rooted in a society. This fact results from, among others, the fact that the rules of it have been promoted in the culture and law systems for ages. Suddenly, lasting just one generation jump of the society into the online stage is related to the ability to use new technological tools and simultaneously keep the standards of behavior from the previous period.

Summing up, one needs to state that copyrights are for the online society what the ownership rights to a tangible thing are for a widely recognized industrial society. Hence, as in the industrial society social relationships were shaped by ownership rights, the social relationships should be shaped by copyrights in the online society. However, this analogy is hampered; this is reflected by the commonness and extent of the unauthorized digital information goods trade via the Internet. The online society is still under the impact of the norms regulating

exchange and access standards characteristic to previous civilization developmental stages. This is a reason for the dissonance between the copy culture and the formal copyright institution; as a consequence, relatively low copyright authority is present in the social consciousness. In their essence, copyrights do not require any changes. Their bi-polar idea is still the same. Certainly, some amendments must be implemented in order to enhance and adjust the law to the current requirements of the online society. This results from the fact that current regulations literally do not keep up with the Internet. Changes in copyright regulations should result in greater transparency, and they need to prevent ridiculous situations that are incomprehensible for the online society.

References

- [1] Barta, J. and Markiewicz, R. (2013) *Prawo autorskie*, Warszawa: Wolters Kluwer Polska SA.
- [2] Besen, S.M. (1984) *Private Copying, Reproduction Costs, and the Supply of Intellectual Property*, Santa Monica: The Rand Corporation.
- [3] Besen, S.M. and Kirby, N.S. (1987) *Private Copying, Appropriability, and Optimal Copying Royalties*, Santa Monica: The Rand Corporation.
- [4] Brol, M. and Czetwertyński, S. (2013a) 'Grupy interesów w społeczeństwie sieciowym,' *Ekonomia i Prawo*, nr 2, pp. 309–319.
- [5] Brol, M. and Czetwertyński, S. (2013b) 'Koncepcja copyleft w procesie wytwarzania dóbr partnerskich,' *Ekonomia*, nr 2(23), pp. 137–150.
- [6] Brol, M. and Czetwertyński, S. (2013c) 'Remarks on network public theory,' *Managerial Economics*, No. 14, pp. 7–16.
- [7] Buchanan, J.M. (2000) *The Collected Works of James M. Buchanan. Volume 7 The Limits of Liberty. Between Anarchy and Leviathan*, Indianapolis: Liberty Fund.
- [8] Castells, M. (2003) *Galaktyka Internetu. Refleksje nad Internetem, biznesem i społeczeństwem*, Poznań: Rebis.
- [9] Cisco Systems Inc. (2016a) *Cisco VNI Forecast and Methodology, 2015–2020*, [Online], Available: <http://www.cisco.com/c/en/us/solutions/collateral/service-provider/visual-networking-index-vni/complete-white-paper-c11-481360.html> [21 Feb 2017].
- [10] Cisco Systems Inc. (2016b) *The Zettabyte Era – Trends and Analysis – Cisco*, [Online], Available: <http://www.cisco.com/c/en/us/solutions/collateral/service-provider/visual-networking-index-vni/vni-hyperconnectivity-wp.html> [20 Feb 2017].
- [11] Czetwertyński, S. (2013) 'Media społeczne a komercjalizacja blogosfery. Zanieczyszczenia,' *Zeszyty Naukowe Uniwersytetu Szczecińskiego. Studia Informatica*, nr 33 (797), pp. 5–17.

-
- [12] Czetwertyński, S. (2015a) 'Nieautoryzowane kopiowanie dóbr informacyjnych w Internecie,' *Nierówności Społeczne a Wzrost Gospodarczy*, nr 44 (4/2015), pp. 66–77.
- [13] Czetwertyński, S. (2015b) 'Wpływ prywatnego kopiowania na opłacalność produkcji telewizyjnych,' *Zeszyty Naukowe Uniwersytetu Szczecińskiego. Studia Informatica*, nr 37 (874), pp. 17–29.
- [14] Czetwertyński, S. (2016a), 'Crisis of copyright authority,' *Ekonomia i Prawo*, vol. 15, nr 1, pp. 47–57.
- [15] Czetwertyński, S. (2016b) 'Nieformalne kanały dystrybucji dóbr kulturowych w internecie,' *Studia Informatica Pomerania*, nr 2 (40), pp. 5–14.
- [16] Czetwertyński, S. (2016c) 'Non-market information goods circulation and the copying culture in the Internet era,' *Ekonomia i Prawo*, vol. 15, nr 4, pp. 455–468.
- [17] Czetwertyński, S. (2016d) 'Oportunizm a prawa autorskie na przykładzie sieci BitTorrent,' *Studia i Prace Wydziału Nauk Ekonomicznych i Zarządzania Uniwersytetu Szczecińskiego 2016*, nr 44/2 2016, pp. 59–72.
- [18] Czetwertyński, S. (2016e), 'Peer Production in the Internet and Unauthorized Copying of an Intellectual Property in the Bit-Torrent Network,' *Oeconomia Copernicana*, vol. 7, No. 3, 2016, pp. 501–513.
- [19] Czetwertyński, S. and Mroczek-Czetwertyńska, A. (2012) 'Wykluczenie cyfrowe w społeczeństwie informacyjnym,' *Nauki Społeczne*, nr 1(5), pp. 116–127.
- [20] Dixon, R. (2004) *Open Source Software Law*, Boston/London: Artech House.
- [21] Florida, R., (2012) *The Rise of the Creative Class, Revisited*, New York: Basic Books.
- [22] Gienas, K., (2008) *Systemy Digital Rights Management w świetle prawa autorskiego*, Warszawa: Wolters Kluwer Polska.
- [23] Golinowska, S. (1994) *Polityka społeczna państwa w gospodarce rynkowej. Studium ekonomiczne*, Warszawa: Wydawnictwo Naukowe PWN.
- [24] Górnicki, L. (2013) *Rozwój idei praw autorskich: od starożytności do II wojny światowej*, Wrocław: Prawnicza i Ekonomiczna Biblioteka Cyfrowa (Uniwersytet Wrocławski).
- [25] Herold, D.K. and Marolt, P. (eds.) (2011) *Online Society in China: Creating, Celebrating, and Instrumentalising the Online Carnival*, London/New York: Routledge.
- [26] Herold, D.K., and Marolt, P. (eds.) (2015) *China online. Locating society in online spaces*, London/New York: Routledge.
- [27] Howkins, J. (2001) *The Creative Economy: How People Make Money From Ideas*, London: Allen Lane The Penguin Press.
- [28] Johnson, W.R. (1985) 'The Economics of Copying,' *Journal of Political Economy*, vol. 93, No. 1, pp. 158–174.
- [29] Karaganis, J. and Renkema, L. (2013) *Copy Culture in the US and Germany*, New York: The American Assembly.

- [30] Kurowicki, J. (2010) *Estetyczność środowiska naturalnego*, Warszawa: Instytut Wydawniczy „Książka i Praca”.
- [31] Lange, O. (1978) *Ekonomia polityczna (Tom I i II)*, Warszawa: Państwowe Wydawnictwo Naukowe.
- [32] Levinson, P. (2006a) *Miękkie ostrze, czyli historia i przyszłość rewolucji informacyjnej*, Warszawa: Warszawskie Wydawnictwo Literackie MUSA SA.
- [33] Levinson, P. (2006b) *Telefon komórkowy: jak zmienił świat najbardziej mobilny ze środków komunikacji*, Warszawa: Warszawskie Wydawnictwo Literackie MUSA SA.
- [34] Levinson, P. (2010) *Nowe nowe media*, Kraków: Wydawnictwo WAM.
- [35] Liebowitz, S.J. (1985) 'Copying and Indirect Appropriability: Photocopying of Journals,' *The Journal of Political Economy*, vol. 93, No. 5, pp. 945–957.
- [36] Marshall, A. (1920) *Principles of Economics. An introductory volume*, London: Macmillan and Co.
- [37] Newbigin, J. (2010) *Creative and Cultural Economy Series/1. The Creative Economy: an Introductory Guide* London: British Council.
- [38] Power, D. (2011) *Priority Sector Report: Creative and Cultural Industries*, Europa Innova Paper n°16, Luxembourg: Publications Office of the European Union.
- [39] Price, D. (2013) *Sizing the piracy universe*, London: NetNames.
- [40] Rifkin, J. (2016) *Społeczeństwo zerowych kosztów krańcowych. Internet przedmiotów. Ekonomia współdzielenia. Zmierzch kapitalizmu*, Warszawa: Wydawnictwo Studio Emka.
- [41] Rose, M. (1993) *Authors and Owners. The Invention of Copyright*, Cambridge/London: Harvard University Press.
- [42] Sandvine Inc. (2015a) *Global Internet Phenomena. Africa, Middle East & North America*, Ontario: Sandvine Incorporated ULC.
- [43] Sandvine Inc. (2015b) *Global Internet Phenomena. Asia-Pacific & Europe*, Ontario: Sandvine Incorporated ULC.
- [44] Sandvine Inc. (2015c) *Global Internet Phenomena. Latin America & North America*, Ontario: Sandvine Incorporated ULC.
- [45] Shapiro, C. and Varian, H. (2007) *Potęga informacji. Strategiczny przewodnik po gospodarce sieciowej*, Gliwice: Wydawnictwo Helion.
- [46] Strykowski, P. and Scorpecci, D., 2009, *Piracy of Digital Content*, Paris: OECD.
- [47] Tassi, P. (2014) '«Game of Thrones» Sets Piracy World Record, But Does HBO Care?,' *Forbes*, 4/15/2014, [Online], Available: <http://www.forbes.com/sites/insertcoin/2014/04/15/game-of-thrones-sets-piracy-world-record-but-does-hbo-care/> [02 Mar 2017].
- [48] Thurow, L.C. (2006) *Powiększanie bogactwa. Nowe reguły gry w gospodarce opartej na wiedzy*, Gliwice: Wydawnictwo Helion.
- [49] Waldman, A.E. (2013) 'Durkheim's Internet: Social and Political Theory in Online Society,' *New York University Journal of Law & Liberty*, vol. 7, no. 2, pp. 355–440.